



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex Parte Naoki KUWATA et al.

**Application for Patent** 

Filed August 30, 2001

**Application No. 09/941,711** 

#### FOR:

# APPARATUS, METHOD, SIGNAL AND COMPUTER PROGRAM PRODUCT CONFIGURED TO PROVIDE OUTPUT IMAGE ADJUSTMENT OF AN IMAGE FILE

#### APPEAL BRIEF

#### **CERTIFICATE OF MAILING**

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Signed:

Peter B. Martine

MARTINE PENILLA & GENCARELLA, LLP Attorneys for Appellants

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#### I. REAL PARTY IN INTEREST

The real party in interest is Seiko Epson Corporation, the assignee of the present application.

#### II. RELATED APPEALS AND INTERFERENCES

The Appellants are not aware of any related appeals or interferences.

#### III. STATUS OF CLAIMS

Claims 1-8, 10-33, 38-60, and 62-71 are pending in the subject application. Claims 9, 34-37, and 61 have been canceled. Claims 1-8, 10-33, 38-60, and 62-71 have been rejected and are on appeal.

#### IV. STATUS OF AMENDMENTS

Appellants submitted an Amendment on August 21, 2007, in response to a non-final Office Action mailed on May 21, 2007. This paper is the last-entered amendment in the present application.

#### V. SUMMARY OF CLAIMED SUBJECT MATTER

Claim 1 defines an image data generating apparatus (Fig. 5, element 22) comprising:

an image data generating mechanism configured to generate image data (page 16, lines 9-10; Fig. 5, element 222);

an image process control information obtaining mechanism configured to obtain image process control information (page 16, line 10; Fig. 5, element 223) that designates

image process conditions for the generated image data at an output apparatus (page 16, lines 29-30; page 5, lines 1-3), wherein the image process control information is preliminarily determined according to a combination of an image generating characteristic of said image data generating apparatus and reproduction characteristics of the output apparatus (page 4, line 31 - page 5, line 3; page 16, line 29 - page 17, line 2);

an output mechanism (page 16, lines 11-20; Fig. 5, slot holding storage device 225) configured to output the generated image data associated with the obtained image process control information; and

a storage mechanism (Fig. 5, storage device 225) that is configured to hold therein the image process control information (page 16, lines 11-12), wherein said image process control information obtaining mechanism is configured to obtain said image process control information from said storage mechanism (page 16, lines 25-28).

Claim 12 defines an image data generating apparatus comprising:

an image data generating mechanism configured to generate image data of a subject (page 16, lines 9-10; Fig. 5, element 222);

a first obtaining mechanism configured to obtain first information preliminarily prepared to reflect image generating characteristics of the image data generating mechanism (page 6, lines 9-12; page 18, lines 11-12; Fig. 5, element 224), the first information being used in color conversion to an absolute color space (page 18, lines 18-19; page 22, lines 13-14; page 19, lines 8-18);

a second obtaining mechanism configured to obtain second information preliminarily prepared to reflect reproduction characteristics of an output apparatus that outputs an image according to image data that is input from the image data generating mechanism, the second information designates an optional image quality adjustment

process to image data that is output to the output apparatus (page 6, lines 12-14; page 18, lines 9-11; Fig. 5, element 224); and

an output mechanism configured to output the generated image data associated with image process control information including at least one of the first information and the second information (page 16, lines 11-20; Fig. 5, slot holding storage device 225).

Claim 18 defines an image data generating apparatus that includes the following means-plus-function elements:

means for generating image data ("digital still cameras (DSC), digital video cameras (DVG), scanners" page 1, lines 11-12; Figs. 4-5, element 22);

means for obtaining image process control information ("image processing circuit 223" page 16, line 10; Fig. 5, element 223; "also possible to apply this to an application program executed on a personal computer, palm-top computer, or other processor-based device" page 20, lines 4-5); and

means for generating an output containing the generated image data and the image process control information ("storage device 225 ... an I/O port, such as a USB, IEEE 1394 port, or a wireless port, such as IR or RE, (e.g., Bluetooth compatible)" page 16, lines 11-20; "optical media such as CD-ROM, CD-R, DVD-ROM and DVDRAM" page 31, lines 1-2).

Claim 22 defines an image data generating apparatus, which is similar to the apparatus defined in claim 12, and includes the following means-plus-function elements:

means for generating image data of a subject ("digital still cameras (DSC), digital video cameras (DVG), scanners" page 1, lines 11-12; Figs. 4-5, element 22);

means for obtaining first information preliminarily prepared to reflect image generating characteristics (page 17, lines 25-26; Fig. 5, element 224);

means for obtaining second information preliminarily prepared to reflect reproduction characteristics of an output apparatus (Fig. 5, element 224); and

means for outputting the generated image data ("storage device 225 ... an I/O port, such as a USB, IEEE 1394 port, or a wireless port, such as IR or RE, (e.g., Bluetooth compatible)" page 16, lines 11-20; "optical media such as CD-ROM, CD-R, DVD-ROM and DVDRAM" page 31, lines 1-2).

Claim 26 defines a method for generating an image data, comprising: generating image data (page 16, lines 9-10; Fig. 5, element 222);

obtaining image process control information (page 16, line 10; Fig. 5, element 223) that designates image process conditions for the generated image data at an output apparatus (page 16, lines 29-30; page 5, lines 1-3), wherein the image process control information is preliminarily determined according to a combination of an image generating characteristic of an image data generating apparatus and reproduction characteristics of the output apparatus (page 4, line 31 - page 5, line 3; page 16, line 29 - page 17, line 2); and

generating an output containing the generated image data associated with the obtained image process control information (page 16, lines 11-20; Fig. 5, storage device 225).

Claim 30 defines a method for generating an image data, comprising steps of: generating image data of a subject (page 16, lines 9-10; Fig. 5, element 222); obtaining first information preliminarily prepared to reflect image generating characteristics of an image data generating apparatus (page 6, lines 9-12; page 18, lines 11-12; Fig. 5, element 224), the first information being used in color conversion to an absolute color space (page 18, lines 18-19; page 22, lines 13-14; page 19, lines 8-18);

obtaining second information preliminarily prepared to reflect reproduction characteristics of an output apparatus that outputs an image according to image data that is input from the image data generating apparatus, the second information designates an optional image quality adjustment process to image data that is output to the output apparatus (page 6, lines 12-14; page 18, lines 9-11; Fig. 5, element 224); and

generating an output containing the generated image data associated with image process control information including at least one of the first information and the second information (page 16, lines 11-20; Fig. 5, slot holding storage device 225).

Claim 38 defines an image processing apparatus (Fig. 6, element 24; page 8, lines 20-21; page 16, lines 3-4) configured to perform image processing on image data, comprising:

a processor (Fig. 6, CPU 30; page 17, lines 28-30, page 20, lines 4-5);

a data retrieval mechanism configured to retrieve said image data and image process control data associated with the image data from an image data generating apparatus (page 8, lines 23-25; page 17, lines 25-26; Fig. 6, storage device 225), wherein

that designates image process conditions for the retrieved image data at an output apparatus (Fig. 3a-3b), wherein the image process control information is preliminarily determined according to a combination of an image generating characteristic of said image data generating apparatus and reproduction characteristics of the output apparatus (page 8, lines 23-27; page 16, line 29 - page 17, line 2); and

a data providing mechanism configured to provide the image data and the image process control data to the processor (page 8, lines 25-26; page 17, line 25; Fig. 6, slot 242; Fig. 1-4 showing image files); and wherein

said processor is configured to perform image processing on said image data using the image data and the image process control information (page 8, lines 26-28;page 20, line 13 – page 21, line 13; Fig. 9).

Claim 47 defines an image processing apparatus configured to perform image processing on image data of a subject, said image data retrieved from an image file, comprising:

a processor (page 8, line 25; Fig. 6, CPU 30; page 17, lines 28-30, page 20, lines 4-5);

a data retrieval mechanism configured to retrieve said image file from an image data generating apparatus and provide the image file to the processor (page 8, lines 23-25; page 17, lines 25-26; Fig. 6, storage device 225), said image file including

first information preliminarily prepared to reflect image generating characteristics of said image data generating apparatus (Fig. 3a-3b), the first information being used in color conversion to an absolute color space (page 14, line 27; page 18, lines 18-19; page 22, lines 13-14; page 19, lines 8-18);

second information preliminarily prepared to reflect reproduction characteristics of an output apparatus that outputs an image according to image data that is input from said image data generating apparatus, the second information designates an optional image quality adjustment process to image data that is output to the output apparatus (page 15, lines 10-20); wherein

said processor is configured to implement

a first reproduction mechanism configured to perform image processing on said image data with said first information (page 19, lines 8-11; Fig. 6, element 24), and

a second reproduction mechanism configured to perform a reproduction process specified for said image data based on said second information (page 19, lines 26-28); and

an image data output mechanism configured to output the image data after said image data has been processed by said first reproduction mechanism and said second reproduction mechanism (Fig. 5, element 241; page 17, lines 23-24).

Claim 52 defines an image processing apparatus configured to perform image processing on image data retrieved from an image file, comprising:

a processor (page 8, line 25; Fig. 6, CPU 30; page 17, lines 29-30, page 20, lines 4-5); and

means for retrieving said image file from an image data generating apparatus and providing the image file to the processor (page 16, lines 11-20; Fig. 5, storage device 225), said image file including

the image data (Fig. 2, element 111), and

image process control data containing image process control information that designates image process conditions for the retrieved image data at an output apparatus (Fig. 3a-3b), wherein the image process control information is preliminarily determined according to a combination of an image generating characteristic of said image data generating apparatus and reproduction characteristics of the output apparatus (page 8, lines 23-27; page 16, line 29 - page 17, line 2), wherein

said processor includes means for processing said image data using the image data and the image process control information (page 17, lines 25-30; Fig. 6, control device 246; page 28, lines 7-8).

Claim 55 An image processing apparatus configured to perform image processing on image data of a subject, said image data retrieved from an image file, comprising:

a processor (page 8, line 25; Fig. 6, CPU 30; page 17, lines 29-30, page 20, lines 4-5); and

means for retrieving said image file from an image data generating apparatus and providing the image file to the processor (page 16, lines 11-20; Fig. 5, storage device 225), said image file including

first information preliminarily prepared to reflect image generating characteristics of an image data generating apparatus (Fig. 3a-3b), the first information being used in color conversion to an absolute color space (page 14, line 27; page 18, lines 18-19; page 22, lines 13-14; page 19, lines 8-18);

second information preliminarily prepared to reflect reproduction characteristics of an output apparatus that outputs an image according to image data that is input from said image data generating apparatus, the second information designates an optional image quality adjustment process to image data that is output to the output apparatus (page 15, lines 10-20), wherein

said processor is configured to implement

means for performing image processing on said image data with said first information (page 18, lines 18-19; page 22, lines 13-14; page 19, lines 8-18), and means for performing a reproduction process specified for said image data based on said second information (page 17, lines 25-30; Fig. 6, control device 246; page 28, lines 7-8); and

means for outputting the image data after said image data has been processed by said means for performing image processing and said means for performing a

reproduction process ("storage device 225 ... an I/O port, such as a USB, IEEE 1394 port, or a wireless port, such as IR or RE, (e.g., Bluetooth compatible)" page 16, lines 11-20; "optical media such as CD-ROM, CD-R, DVD-ROM and DVDRAM" page 31, lines 1-2).

Claim 57 defines a method for processing image data, comprising steps of:
retrieving said image data and image process control information from an image
data generating apparatus (page 8, lines 23-25; page 17, lines 25-26; Fig. 6, storage device
225);

providing the image data and the image process control information to the processor (page 8, line 25; Fig. 6, CPU 30; page 17, lines 29-30, page 20, lines 4-5), wherein

the image process control information designates image process conditions for the retrieved image data at an output apparatus (Fig. 3a-3b), and wherein the image process control information is preliminarily determined according to a combination of an image generating characteristic of said image generating apparatus and reproduction characteristics of the output apparatus (page 8, lines 23-27; page 16, line 29 - page 17, line 2); and

processing said image data using the image data and the image process control information (page 8, lines 26-28;page 20, line 13 – page 21, line 13; Fig. 9).

Claim 62 defines a computer program product (page 7, line 22; Abstract), comprising:

a computer storage medium (Fig. 6, ROM 31, RAM 32); and

a computer program code stored in the computer storage medium for implementing an image processing on a computer (Fig. 4, PC), the computer program code having

a first computer code configured to retrieve image data and image process control data (page 16, line 10; Fig. 5, element 223) associated with the image data from an image data generating apparatus, wherein the image process control data contains image process control information that designates image process conditions for the image data at an output apparatus (page 16, lines 29-30; page 5, lines 1-3), and wherein the image process control information is preliminarily determined according to a combination of an image generating characteristic of said image data generating apparatus and reproduction characteristics of the output apparatus (page 4, line 31 - page 5, line 3; page 16, line 29 - page 17, line 2),

a second computer code configured to perform image processing on the image data using the image data and the image process control information, if the image process control data is retrieved (page 16, lines 11-20; Fig. 5, storage device 225).

Claim 64 defines an image data processing system, comprising:

an image data generating device configured to generate image data (page 16, lines 9-10; Fig. 5, element 222);

an image process control information obtaining mechanism configured to obtain image process control information (page 16, line 10; Fig. 5, element 223) that designates image process conditions for the generated image data at an output apparatus (page 16, lines 29-30; page 5, lines 1-3), wherein the image process control information is preliminarily determined according to a combination of an image generating characteristic of said image data generating device and reproduction characteristics of the output apparatus (page 4, line 31 - page 5, line 3; page 16, line 29 - page 17, line 2);

an output mechanism (page 16, lines 11-20; Fig. 5, slot holding storage device 225) configured to output the generated image data associated with the obtained image process control information in an output file;

a processor (page 8, line 25; Fig. 6, CPU 30; page 17, lines 29-30, page 20, lines 4-5); and

a data retrieval mechanism configured to retrieve said output file and provide the output file to the processor (page 8, lines 23-25; page 17, lines 25-26; Fig. 6, storage device 225), wherein

said processor is configured to perform image processing on said image data using the image data and the image process control information (page 8, lines 26-28;page 20, line 13 - page 21, line 13; Fig. 9).

Claim 66 defines an image data processing system (Fig. 4), comprising: an image data generating apparatus (Fig. 5, element 22), including

an image data generating mechanism configured to generate image data of a subject and store said image data in an image file (Fig. 5, element 222; page 16, lines 9-10),

a first image obtaining mechanism configured to obtain first information preliminarily prepared to reflect image generating characteristics of the image data generating apparatus (Fig. 5, element 223; page 6, lines 9-12; page 18, lines 9-10), the first information being used in color conversion to an absolute color space (page 18, lines 18-19; page 22, lines 13-14; page 19, lines 8-18),

a second image obtaining mechanism configured to obtain second information preliminarily prepared to reflect reproduction characteristics of an output apparatus that outputs an image according to image data that is input from the image data

generating apparatus, the second information designates an optional image quality adjustment process to image data that is output to the output apparatus (Fig. 5, element 224; page 6, lines 12-16; page 18, lines 9-11); and

an image processing apparatus (Fig. 6, element 24; page 8, lines 20-21; page 16, lines 3-4), including

a processor (Fig. 6, CPU 30; page 17, line 28),

a data retrieval mechanism configured to retrieve said generated image data, said first information, and second information and provide said generated image data, said first information and said second information to the processor (Fig. 6, storage device 225; page 8, lines 23-25; page 17, lines 25-26), wherein

said processor is configured to implement

a first reproduction mechanism configured to perform image processing on said image data with said first information (page 14, line 27; page 18, lines 18-19; page 22, lines 13-14; page 19, lines 8-18), and

a second reproduction mechanism configured to perform a reproduction process specified for said image data based on said second information (page 15, lines 10-20), and

an image data output mechanism configured to output the image data after said image data has been processed by said first reproduction mechanism and said second reproduction mechanism (Fig. 5, element 241; page 17, lines 23-24).

Claim 67 defines an image data processing system, comprising:

means for generating image data ("digital still cameras (DSC), digital video cameras (DVG), scanners" page 1, lines 11-12; Figs. 4-5, element 22);

means for obtaining image process control information that designates image process conditions for the generated image data at an output apparatus, wherein the image process control information is preliminarily determined according to a combination of an image generating characteristic of said means for generating image data and reproduction characteristics of the output apparatus ("image processing circuit 223" page 16, line 10; Fig. 5, element 223; "also possible to apply this to an application program executed on a personal computer, palm-top computer, or other processor-based device" page 20, lines 4-5);

means for generating an image file with image process control data containing the image process control information ("storage device 225 ... an I/O port, such as a USB, IEEE 1394 port, or a wireless port, such as IR or RE, (e.g., Bluetooth compatible)" page 16, lines 11-20; "optical media such as CD-ROM, CD-R, DVD-ROM and DVDRAM" page 31, lines 1-2);

a processor (page 8, line 25; Fig. 6, CPU 30; page 17, lines 29-30, page 20, lines 4-5); and

means for retrieving said image file and providing the image file to the processor (page 16, lines 11-20; Fig. 5, storage device 225), said image file including

the image process control data (Fig. 3a-3b), wherein

the image data (Fig. 2, element 111), and

said processor includes means for processing said image data using the image process control information (page 17, lines 25-30; Fig. 6, control device 246; page 28, lines 7-8).

Claim 68 defines an image data processing system, comprising: means for generating an image file, including,

means for generating image data of a subject ("digital still cameras (DSC), digital video cameras (DVG), scanners" page 1, lines 11-12; Figs. 4-5, element 22),

means for obtaining first information preliminarily prepared to reflect image generating characteristics of the means for generating image data, the first information being used in color conversion to an absolute color space (Fig. 5, element 223; page 6, lines 9-12; page 18, lines 9-10),

means for obtaining second information preliminarily prepared to reflect reproduction characteristics of an output apparatus that outputs an image according to image data that is input from the means for generating image data, the second information designates an optional image quality adjustment process to image data that is output to the output apparatus, (Fig. 5, element 224; page 6, lines 12-16; page 18, lines 9-11) and

means for generating the image file containing the image data and at least one of the first information and the second information ("storage device 225 ... an I/O port, such as a USB, IEEE 1394 port, or a wireless port, such as IR or RE, (e.g., Bluetooth compatible)" page 16, lines 11-20; "optical media such as CD-ROM, CD-R, DVD-ROM and DVDRAM" page 31, lines 1-2); and

an image processing apparatus (Fig 6, element 24; page 8, lines 20-21) including, a processor (page 8, line 25; Fig. 6, CPU 30; page 17, lines 29-30, page 20, lines 4-5), and

means for retrieving said image file and providing said image file to the processor (Fig. 6, storage device 225; page 8, lines 23-25; page 17, lines 25-26), said image file including

the image data, the first information and the second information (Fig. 3a-3b), wherein

said processor includes means for processing said image data using the first information (page 18, lines 18-19; page 22, lines 13-14; page 19, lines 8-18) and the second information (page 17, lines 25-30; page 28, lines 7-8).

Claim 69 defines an image data generating apparatus comprising:

an image data generating module configured to generate image data of a subject by photoelectric converter (page 16, lines 7-8);

a storage module (page 16, line 10; Fig. 5, element 223) configured to store image process control information (page 16, lines 11-12) that is preliminarily determined according to an output result of the generated image data at an output apparatus, the image process control information designating an image processing condition for image data that is output to the output apparatus (page 16, lines 25-28; Fig 6, element 24);

an image process control information obtaining module configured to obtain the image process control information from the storage module (page 16, line 10; Fig. 5, element 222); and

an output module (page 16, lines 11-20; Fig. 5, slot holding storage device 225) configured to output the generated image data associated with the obtained image process control information.

Claim 71 defines a digital still camera (Fig. 5, element 22; page 16, line 16) comprising:

an image data generating module that generates image data (page 16, lines 9-10; Fig. 5, element 222);

an image process control information obtaining module that obtains image process control information (page 16, line 10; Fig. 5, element 223), wherein the image process control module is preliminarily determined according to a combination of image

generating characteristics of the digital still camera and reproducing characteristics of an output apparatus (page 4, line 31 - page 5, line 3; page 16, line 29 - page 17, line 2), wherein the image process control information designates an image processing condition for image data that is output to the output apparatus (page 16, line 24); and

an output module that outputs the generated image data associated with the obtained image process control information (page 16, lines 11-20; Fig. 5, slot holding storage device 225).

It should be appreciated that the above description represents only a summary of the claimed subject matter. A more in-depth discussion of the subject matter is provided in the Detailed Description section of the application.

#### VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The following grounds of rejection are presented for review:

- A. Whether claims 1, 2, 5-8, 10, 11, 18-21, 26-29, 52-54, 57-60, 62-65, 67, and 69-71 are patentable under 35 U.S.C. § 102(b) over *Shiota et al.* ("*Shiota*") (US 6,011,547);
- B. Whether claims 3 and 4 are patentable under 35 U.S.C. § 103(a) over *Shiota* in view of *Liu et al.* ("*Liu*") (US 6,523,046 B2);
- C. Whether claims 12-17, 22-25, 30-33, 47-51, 55, and 56 are patentable under 35 U.S.C. § 103(a) over *Shiota* in view of *Telle* (US 5,105,266);
- D. Whether claims 38-42 and 44-46 are patentable under 35 U.S.C. § 103(a) over *Shiota* in view of *Kondo* (US 6,281,992 B1);
- E. Whether claim 43 is patentable under 35 U.S.C. § 103(a) over *Shiota* in view of *Kondo*, and further in view of *Liu*; and
- F. Whether claims 66 and 68 are patentable under 35 U.S.C. § 103(a) over *Shiota* in view of *Telle*, and further in view of *Kondo*.

#### VII. ARGUMENT

Appellants present the following arguments with respect to the rejected claims:

- A. Rejection of claims 1, 2, 5-8, 10, 11, 18-21, 26-29, 52-54, 57-60, 62-65, 67, and 69-71 under 35 U.S.C. § 102(b) over *Shiota* 
  - 1. <u>Claims 1, 2, 5-8, 10, 11, 18-21, 26-29, 52-54, 57-60, 62-65, 67, 69, and 70</u>
- i. Shiota does not disclose, among other features, that the image process control information is preliminarily determined according to a combination of an image generating characteristic of the image data generating apparatus and reproduction characteristics of the output apparatus

The *Shiota* reference discloses that an image reproducing apparatus adds an image processing condition to image data. *Shiota*, however, carries out a computation in accordance with a predetermined algorithm to obtain an optimal image processing condition, and adds the obtained condition to the target image data (see column 5, line 54, to column 6, line 9).

The *Shiota* reference fails to state, and neither discloses nor suggests, at least one feature of the presently claimed subject matter, namely, the image process control information being preliminarily determined according to a combination of an image generating characteristic of an image data generating apparatus and reproduction characteristics of an output apparatus.

As the claimed configuration preliminarily determines the image process control information according to a combination of the image generating characteristic of the image data generating apparatus and reproduction characteristics of the output apparatus, the image reproducing apparatus or the image data generating apparatus does not have to carry out a computation in accordance with a predetermined algorithm, and the image data generating apparatus is capable of adding the image process control information to image data when generating the image data.

The *Shiota* reference states "it becomes unnecessary to carry out the same processing again" (column 5, lines 59-60). As such, *Shiota's* invention is configured to add an image processing condition to image data, so as to avoid the inefficiency of repeating the same routine, namely, carrying out a computation in accordance with a predetermined algorithm to obtain an optimal image processing condition. Conversely, *Shiota's* configuration requires at least one round of computation in accordance with a predetermined algorithm to obtain an optimal image processing condition.

On the other hand, the claimed subject matter does not need a single routine of carrying out a computation in accordance with a predetermined algorithm to obtain an optimal image processing condition as disclosed in the *Shiota* reference. In the presently claimed subject matter, the image process control information is preliminarily determined according to a combination of the image generating characteristic of the image data generating apparatus and the reproduction characteristics of the output apparatus, and the image processing apparatus only has to carry out image processing based on the image process control information.

In the Response to Arguments section of the Office Action dated November 14, 2007, the Office has asserted that *Shiota* "clearly shows that the 'same processing' refers to the <u>initial setup</u> of the overall system wherein the optimal image processing condition is determined based on the identities of the input and output devices" (emphasis added), and that "this preliminary setup does not have to be repeated every time a user desires to make a print." Office Action at page 2.

Appellants respectfully disagree. There is no mention in *Shiota* that "same processing" refers to the initial setup of the overall system. The Office has interpreted that "set-up processing unit 11" (column, line 54) only operates during initial setup of the

system. However, "set-up processing unit 11 [carries] out image processing to enhance a picture quality of image data in each image file" (column 5, lines 45-46). If processing unit 11 operated only during initial setup of the system, then it would not be possible to process different pictures, and *Shiota's* invention would not function as intended.

Appellants respectfully traverse the Office's contention that the *Shiota* reference discloses the claimed feature of an image data generating apparatus directly or indirectly associating image process control information with image data. In the *Shiota* reference, the image data generating apparatus is incapable of setting an image processing condition because the image reproducing apparatus sets an optimal image processing condition. Thus, the *Shiota* reference fails to disclose the concept of directly associating image process control information with image data.

Shiota's image reproducing apparatus sets an "optimal" image processing condition based on recording information, and this recording information is just the condition at the time of image shooting, as defined in the Shiota reference (see column 4, line 5, to column 5, line 35, and particularly column 5, lines 22-23). This demonstrates that the Shiota reference fails to disclose or suggest the concept of indirectly associating image process control information with image data.

The claimed subject matter enables an image data generating apparatus to control an image processing apparatus (e.g., a printer) so as to easily obtain a high quality image without the need to perform the task of setting an image processing condition with the image processing apparatus. In contrast, in *Shiota's* configuration, the image reproducing apparatus sets an optimal image processing condition, and the image data generating apparatus is incapable of controlling the image reproducing apparatus. Instead, the image

reproducing apparatus, by itself, independently carries out image processing based on the recording information (Exif printing).

Shiota does not teach that the image data generating apparatus sets an image processing condition, because it is the image reproducing apparatus that sets the optimal image processing condition (column 5, lines 54-59). Thus, Shiota fails to disclose (or suggest) the concept of directly associating image process control information with image data. Shiota's image reproducing apparatus sets an "optimal" image processing condition based on recording information, and this recording information is just a condition at the time of image shooting, as defined in the Shiota reference. Thus, Shiota also fails to disclose or suggest the concept of indirectly associating image process control information with image data.

The claimed subject matter enables an image data generating apparatus to control an image processing apparatus (such as a printer) to easily obtain a high quality image while omitting the task of setting an image processing condition in the image processing apparatus. *Shiota* teaches, on the other hand, that the image reproducing apparatus sets an optimal image processing condition, and the image data generating apparatus is incapable of controlling the image reproducing apparatus, but rather, the image reproducing apparatus, itself, independently carries out image processing based on the recording information.

The claimed subject matter is plainly distinguishable from *Shiota* because it solves a different problem than is addressed in *Shiota*. In view of the foregoing, the claimed subject matter is distinguishable from the configuration shown by *Shiota*.

Accordingly, as demonstrated above, independent claims 1, 18, 26, 52, 57, 62, 64, 67, and 69 are patentable under 35 U.S.C. § 102(b) over *Shiota* because this reference does

not disclose each and every feature specified in these claims. The claims depending from the above-listed independent claims are likewise patentable over *Shiota* for at least the same reasons set forth regarding the applicable independent claim.

#### 2. <u>Claim 71</u>

### i. Shiota does not teach a digital still camera with an image process control information obtaining module

With respect to claim 71, the Office has asserted that *Shiota* discloses "an <u>image</u> generating module (figure 1(1) of Shiota) that generates image data ... [and] an image process control information obtaining module (figure 1(2) of Shiota) that obtains image process control information" (Office Action at page 10, emphasis added). Appellants respectfully disagree.

Claim 71 defines "a digital still camera," and not "an image generating module" as asserted by the Office. *Shiota* shows digital camera 1 in Figure 1 (Figure 1 is reproduced on page 25 of this brief). However, the Office has asserted that *Shiota* teaches "an image process control information obtaining module" in element 2 of Figure 1. Image server 2 is *not part of* digital camera 1, thus the Office's rejection is improper because claim 71 specifies an image generating module that is part of a digital still camera.

#### ii. Shiota does not teach a digital still camera with an output module

Further with respect to claim 71, the Office has asserted that *Shiota* discloses "an output module (figure 1(14) of Shiota)" (Office Action at page 10). Appellants respectfully disagree.

Shiota teaches a digital camera 1 and a print 14 (see Fig. 1). However, print 14 is not part of digital camera 1, and is not even generated by the digital camera (print 14 is instead generated by printer 12, which forms part of the image reproducing apparatus 3).

Thus, print 14 cannot reasonably be used as evidence that establishes that digital still camera 1 of *Shiota* includes an output module as specified in the claim 71.

B. Rejection under 35 U.S.C. 103(a) over *Shiota* in view of *Liu* (US 6,523,046 B2)

#### 1. Claims 3 and 4

## i. The Liu reference does not cure the deficiencies of the Shiota reference relative to claim 1

Each of claims 3 and 4 ultimately depends from independent claim 1. Accordingly, claims 3 and 4 are patentable under 35 U.S.C. § 103(a) over the combination of *Shiota* in view of *Liu* for at least the same reasons set forth above regarding claim 1.

- C. Rejection under 35 U.S.C. § 103(a) over *Shiota* in view of *Telle* (US 5,105,266)
  - 1. Claims 12-17, 22-25, 30-33, 47-51, 55, and 56
- i. Neither the *Shiota* reference nor the *Telle* reference discloses or suggests obtaining, by an *image data generating apparatus*, information *preliminarily* prepared to reflect reproduction characteristics of an output apparatus

Appellants respectfully submit that the rejection of claims 12-17, 22-25, 30-33, 47-51, 55, and 56 under 35 U.S.C. § 103(a) as being unpatentable over *Shiota* in view of *Telle* (US 5,105,266) is improper. Independent claims 12, 22, 30, 47, and 55 define obtaining, by an image data generating apparatus, information <u>preliminarily</u> prepared to reflect reproduction characteristics of an <u>output apparatus</u> (see this or similar, but not necessarily identical language in the aforementioned independent claims, emphasis added).

Accordingly, independent claims 12, 22, 30, 47 and 55, as well as the corresponding dependent claims, are believed to be patentable under 35 U.S.C. § 103(a) over the combination of *Shiota* in view of *Telle* for at least the same reasons set forth above regarding claim 1.

D. Rejection under 35 U.S.C. § 103(a) over *Shiota* in view of *Kondo* (US 6,281,992 B1)

#### 1. Claims 38-42 and 44-46

i. Neither the *Shiota* reference nor the *Kondo* reference discloses or suggests the use of image process control information that is *preliminarily* determined according to a combination of an image generating characteristic of an image data generating apparatus and reproduction characteristics of the output apparatus

Appellants respectfully submit that the rejection of claims 38-42 and 44-46 under 35 U.S.C. § 103(a) as being unpatentable over *Shiota* in view of *Kondo* (US 6,281,992 B1) is improper. Independent claim 38 defines an image processing apparatus that retrieves image process control information that is <u>preliminarily determined</u> according to a combination of an image generating characteristic of an <u>image data generating apparatus</u> and reproduction characteristics of the output apparatus.

Accordingly, independent claim 38, as well as claims 39-42 and 44-46 that ultimately depend therefrom, is believed to be patentable under 35 U.S.C. § 103(a) over the combination of *Shiota* in view of *Kondo* for at least the same reasons set forth above regarding claim 1.

E. Rejection under 35 U.S.C. § 103(a) over *Shiota* in view of *Kondo*, and further in view of *Liu* 

#### 1. <u>Claim 43</u>

i. The Kondo reference does not cure the deficiencies of the Shiota and Liu references relative to claim 38

Claim 43 ultimately depends from independent claim 38. Accordingly, claim 43 is patentable under 35 U.S.C. § 103(a) over the combination of *Shiota et al.* in view of *Kondo* and *Liu et al.* for at least the same reasons set forth above in section D regarding claim 38.

F. Rejection under 35 U.S.C. § 103(a) over *Shiota* in view of *Telle*, and further in view of *Kondo* 

#### 1. Claim 66 and 68

i. Neither the *Shiota*, nor the *Telle*, nor the *Kondo* references disclose an image processing apparatus including an image data output mechanism configured to output the image data after said image data has been processed

Appellants respectfully request submit that the rejection of claims 66 and 68 under 35 U.S.C. § 103(a) as being unpatentable over *Shiota* in view of *Telle* and *Kondo* is improper. Claim 66 defines an image processing apparatus including an image data output mechanism configured to output the image data after the image data has been processed by the first reproduction mechanism and the second reproduction mechanism. The Office has asserted that *Shiota* teaches an image processing apparatus in figure 1(2) (page 18, third paragraph). Further, the Office has asserted that *Shiota* teaches an image data output mechanism in figure 1(12) and col. 5, lines 44-50 (excerpted below) (page 18, third to last paragraph):

The image reproducing apparatus 3 comprises a set-up processing unit 11 for carrying out image processing to enhance a picture quality of image data in each image file 7, a printer 12 or a display interface 13 for respectively outputting the image data having been set up by the set-up processing unit 11 in the form of a print 14 or in the form of a display on a monitor 15. The above recording information 9 is used directly for the processing in the set-up unit 11 or for judgment as to whether or not a predetermined processing should be carried out (col. 5, lines 44-53, emphasis added).

However, printer 12 is part of image reproducing apparatus 3, and not part of image server 2, which the Office has asserted suggests the image processing apparatus. For ease of reference, Figure 1 of *Shiota* is reproduced below.

F | G.1 IMAGE SERVER IMAGE REPRODUCING APPARATUS DIGITAL CAMERA 11م SET-UP ROCESSING UNIT PRINTER IMAGE AE IMAGE FILE 7 PROŒSSING UNIT UNIT IMAGE DATA 8 11 13ے RECORDING INFORMATION RECORDING INFORMATION SET-UP PROCESSING DISPLAY ADDING UNIT PROCESSING CONDITION UNIT MONITOR `3

Therefore, *Shiota* does not teach an image processing apparatus including an image data output mechanism configured to output the image data after the image data has been processed by the first reproduction mechanism and the second reproduction mechanism.

With respect to claim 68, the Office has asserted that "the mechanisms of claim 66 provide the means of claim 68" (page 19, last line). Accordingly, claims 66 and 68 are believed to be patentable under 35 U.S.C. § 103(a) over the combination of *Shiota* in view of *Telle* and *Kondo*.

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G. Conclusion

In summary, the Examiner has either erred in characterizing the *Shiota* reference

relative to the claimed subject matter or has misinterpreted the subject matter defined in the

claims. Thus, for at least the specific reasons set forth above, the Shiota reference does not

disclose each and every feature of the subject matter defined in claims 1, 2, 5-8, 10, 11, 18-

21, 26-29, 52-54, 57-60, 62-65, 67, 69, and 70. Accordingly, these claims are patentable

under 35 U.S.C. § 102(b) over Shiota. With regard to the obviousness rejections, as

discussed above, the secondary references do not cure the deficiencies of the Shiota

reference relative to the claimed subject matter.

For the foregoing reasons, the Examiner has erred in rejecting claims 1-8, 10-33,

38-60, and 62-71 of the subject application. Therefore, the rejections are improper and

should be reversed.

Respectfully submitted,

MARTINE PENILLA & GENCARELLA, LLP

Peter B. Martine

Reg. No. 32,043

710 Lakeway Drive, Suite 200

Sunnyvale, CA 94085

Telephone: (408) 749-6900

Facsimile: (408) 749-6901

**Customer Number 25920** 

#### VIII. CLAIMS APPENDIX

Claim 1: An image data generating apparatus comprising:

an image process control information obtaining mechanism configured to obtain image process control information that designates image process conditions for the generated image data at an output apparatus, wherein the image process control

an image data generating mechanism configured to generate image data;

characteristic of said image data generating apparatus and reproduction characteristics of

information is preliminarily determined according to a combination of an image generating

the output apparatus;

an output mechanism configured to output the generated image data associated with the obtained image process control information; and

a storage mechanism that is configured to hold therein the image process control information,

wherein said image process control information obtaining mechanism is configured to obtain said image process control information from said storage mechanism.

Claim 2: The image data generating apparatus of claim 1, wherein:

the image process control information and the generated image data are contained in one output file.

Claim 3: The image data generating apparatus of Claim 2, wherein: said output file is an Exlf file.

Claim 4: The image data generating apparatus of Claim 3, wherein:

the image process control information is stored at a Makernote portion of the Exlf file.

Claim 5: The image data generating apparatus of Claim 1, wherein:

the image process control information contains information for controlling the reproduction characteristics of the image data output apparatus.

**Claim 6:** The image data generating apparatus of Claim 5, wherein:

the image process control information includes gamma correction information.

Claim 7: The image data generating apparatus of Claim 6, wherein:

said image process control information further comprises additional information that is correlated to said image data, said additional information including at least one of color space information, contrast information, color balance information, sharpness information, color correction information, shadow point information, highlight point information, brightness correction information, and highlight color information.

Claim 8: The image data generating apparatus of Claim 1, further comprising:

an optional image process condition obtaining mechanism configured to obtain an optional image process condition set by user;

an image control information adding mechanism configured to add the obtained optional image process condition to the image process control information; and

wherein the image process control information obtaining mechanism obtains the image process control information to which the optional image process condition is added.

Claim 10: The image data generating apparatus of claim 1, further comprising:

a data transfer mechanism configured to transmit the image data and the image process control information.

Claim 11: The image data generating apparatus of claim 1, wherein:

the image data generating apparatus is at least one of a digital still camera, a digital video camera, and a scanning device.

Claim 12: An image data generating apparatus comprising:

an image data generating mechanism configured to generate image data of a subject;

a first obtaining mechanism configured to obtain first information preliminarily prepared to reflect image generating characteristics of the image data generating mechanism, the first information being used in color conversion to an absolute color space;

a second obtaining mechanism configured to obtain second information preliminarily prepared to reflect reproduction characteristics of an output apparatus that outputs an image according to image data that is input from the image data generating mechanism, the second information designates an optional image quality adjustment process to image data that is output to the output apparatus; and

an output mechanism configured to output the generated image data associated with image process control information including at least one of the first information and the second information.

#### Claim 13: The image data generating apparatus of Claim 12, wherein:

the image data, the first information and the second information are contained in one image file.

#### Claim 14: The image data generating apparatus of Claim 12, wherein:

the first information includes at least one of gamma correction information, color space information, and negative image data value information.

#### Claim 15: The image data generating apparatus of Claim 12, wherein:

the second information includes at least one of an image correction characteristic associated with generating a print data from an image data.

#### Claim 16: The image data generating apparatus of Claim 15, wherein:

the second information includes at least one of contrast information, color balance information, sharpness information, stored color correction information, shadow point information, highlight point information, saturation information, and brightness correction information.

#### Claim 17: The image data generating apparatus of Claim 12, wherein:

the image data generating apparatus is at least one of a digital still camera, a digital video camera, and a scanning device.

Claim 18: An image data generating apparatus, comprising:

means for generating image data;

means for obtaining image process control information that designates image process conditions for the generated image data at an output apparatus, wherein the image process control information is preliminarily determined according to a combination of an image generating characteristic of said means for generating image data and reproduction characteristics of the output apparatus; and

means for generating an output containing the generated image data and the image process control information.

Claim 19: The image data generating apparatus of Claim 18, wherein:

each of said means for generating image data, means for obtaining image process control information, and means for generating an output is a computer program product having computer readable instructions.

Claim 20: The image data generating apparatus of Claim 19, wherein:

the image process control information and the generated image data are contained in one output file.

Claim 21: The image data generating apparatus of Claim 18, wherein:

the image process control information includes gamma correction information.

#### Claim 22: An image data generating apparatus comprising:

means for generating image data of a subject;

means for obtaining first information preliminarily prepared to reflect image generating characteristics of the means for generating image data, the first information being used in color conversion to an absolute color space;

means for obtaining second information preliminarily prepared to reflect reproduction characteristics of an output apparatus that outputs an image according to image data that is input from the means for generating image data, the second information designates an optional image quality adjustment process to image data that is output to the output apparatus; and

means for outputting the generated image data associated with image process control information including at least one of the first information and the second information.

#### Claim 23: The image data generating apparatus of Claim 22, wherein:

said means for outputting the generated image data includes means for including the image data, the first information and the second information in one output file.

#### Claim 24: The image data generating apparatus of Claim 22, wherein:

the first information includes at least one of gamma correction formation, color space information, and negative image data value information.

#### Claim 25: The image data generating apparatus of Claim 22, wherein:

the second information includes at least one of contrast information, color balance information, sharpness information, stored color correction information, shadow point

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information, highlight point information, saturation information, and brightness correction information.

Claim 26: A method for generating an image data, comprising steps of:

generating image data;

obtaining image process control information that designates image process conditions for the generated image data at an output apparatus, wherein the image process control information is preliminarily determined according to a combination of an image generating characteristic of an image data generating apparatus and reproduction characteristics of the output apparatus; and

generating an output containing the generated image data associated with the obtained image process control information.

#### Claim 27: The method of Claim 26, wherein:

said steps of generating image data, obtaining image process control information, and generating an output are computer-implemented process steps.

#### Claim 28: The method of Claim 27, further comprising a step of:

including said image process control information and said image data in one output file.

#### Claim 29: The method of Claim 26, wherein:

the image process control information includes gamma correction information.

Claim 30: A method for generating an image data, comprising steps of:

generating image data of a subject;

obtaining first information preliminarily prepared to reflect image generating characteristics of an image data generating apparatus, the first information being used in color conversion to an absolute color space;

obtaining second information preliminarily prepared to reflect reproduction characteristics of an output apparatus that outputs an image according to image data that is input from the image data generating apparatus, the second information designates an optional image quality adjustment process to image data that is output to the output apparatus; and

generating an output containing the generated image data associated with image process control information including at least one of the first information and the second information.

## Claim 31: The method of Claim 30, wherein:

said step of generating an output includes including the image data, the first information and the second information in one output file.

### Claim 32: The method of Claim 30, wherein:

the first information includes at least one of gamma correction information, color space information, and negative image data value information.

#### Claim 33: The method of Claim 30, wherein:

the second information includes at least one of contrast information, color balance information, sharpness information, stored color correction information, shadow point

information, highlight point information, saturation information, and brightness correction information.

Claim 38: An image processing apparatus configured to perform image processing on image data, comprising:

a processor;

a data retrieval mechanism configured to retrieve said image data and image process control data associated with the image data from an image data generating apparatus, wherein

the image process control data contains image process control information that designates image process conditions for the retrieved image data at an output apparatus, wherein the image process control information is preliminarily determined according to a combination of an image generating characteristic of said image data generating apparatus and reproduction characteristics of the output apparatus; and

a data providing mechanism configured to provide the image data and the image process control data to the processor; and wherein

said processor is configured to perform image processing on said image data using the image data and the image process control information.

Claim 39: The image processing apparatus of Claim 38, wherein:

if the process control data is not retrieved, the data providing mechanism provides the image data and a predetermined image process control data to the processor, and wherein the predetermined image process control data is configured to general purpose image processing.

Claim 40: The image processing apparatus of Claim 38, wherein: said processor is hosted in a computer.

Claim 41: The image processing apparatus of Claim 38, wherein the output apparatus is a printer.

Claim 42: The image processing apparatus of Claim 38, wherein:

said image process control data and said image data are contained in a single image file.

Claim 43: The image processing apparatus of Claim 42, wherein:

the image process control data is stored at a Makernote portion of the Exlf file, and the data retrieval mechanism retrieves the Makernote portion to obtain the image process control data.

Claim 44: The image processing apparatus of Claim 42, wherein:

the image process control information contains information for controlling the reproduction characteristics of the image data at the output apparatus.

Claim 45: The image processing apparatus of Claim 44, wherein:

the image process control information includes gamma correction information.

**Claim 46:** The image processing apparatus of Claim 45, wherein:

said image process control information further comprises additional information that is correlated to said image data, said additional information including at least one of

color space information, contrast information, color balance information, sharpness information, color correction information, shadow point information, highlight point information, brightness correction information, and highlight color information.

Claim 47: An image processing apparatus configured to perform image processing on image data of a subject, said image data retrieved from an image file, comprising:

a processor;

a data retrieval mechanism configured to retrieve said image file from an image data generating apparatus and provide the image file to the processor, said image file including

first information preliminarily prepared to reflect image generating characteristics of said image data generating apparatus, the first information being used in color conversion to an absolute color space;

second information preliminarily prepared to reflect reproduction characteristics of an output apparatus that outputs an image according to image data that is input from said image data generating apparatus, the second information designates an optional image quality adjustment process to image data that is output to the output apparatus; wherein

said processor is configured to implement

a first reproduction mechanism configured to perform image processing on said image data with said first information, and

a second reproduction mechanism configured to perform a reproduction process specified for said image data based on said second information; and

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an image data output mechanism configured to output the image data after said image data has been processed by said first reproduction mechanism and said second reproduction mechanism.

### Claim 48: The image processing apparatus of Claim 47, wherein:

the first information includes at least one of gamma correction information, color space information, and negative image data value information.

## Claim 49: The image processing apparatus of Claim 47, wherein:

the second information includes at least one of an image correction characteristic associated with generating a print data from an image data.

# Claim 50: The image processing apparatus of Claim 49, wherein:

the second information includes at least one of contrast information, color balance information, sharpness information, stored color correction information, shadow point information, highlight point information, saturation information, and brightness correction information.

### **Claim 51:** The image processing apparatus of Claim 47, wherein:

said image processing apparatus includes a printer.

Claim 52: An image processing apparatus configured to perform image processing on image data retrieved from an image file, comprising:

a processor; and

means for retrieving said image file from an image data generating apparatus and providing the image file to the processor, said image file including

the image data, and

image process control data containing image process control information that designates image process conditions for the retrieved image data at an output apparatus, wherein the image process control information is preliminarily determined according to a combination of an image generating characteristic of said image data generating apparatus and reproduction characteristics of the output apparatus, wherein

said processor includes means for processing said image data using the image data and the image process control information.

Claim 53: The image processing apparatus of Claim 52, wherein:

the image file includes said image process control data and said image data in a single file.

Claim 54: The image processing apparatus of Claim 53, wherein:

the image process control information includes gamma correction information.

Claim 55: An image processing apparatus configured to perform image processing on image data of a subject, said image data retrieved from an image file, comprising:

a processor; and

means for retrieving said image file from an image data generating apparatus and providing the image file to the processor, said image file including

first information preliminarily prepared to reflect image generating characteristics of an image data generating apparatus, the first information being used in color conversion to an absolute color space;

second information preliminarily prepared to reflect reproduction characteristics of an output apparatus that outputs an image according to image data that is input from said image data generating apparatus, the second information designates an optional image quality adjustment process to image data that is output to the output apparatus, wherein

said processor is configured to implement

means for performing image processing on said image data with said first information, and

means for performing a reproduction process specified for said image data based on said second information; and

means for outputting the image data after said image data has been processed by said means for performing image processing and said means for performing a reproduction process.

## Claim 56: The image processing apparatus of Claim 55, wherein:

the first information includes at least one of gamma correction information, color space information, and negative image data value information.

Claim 57: A method for processing image data, comprising steps of:

retrieving said image data and image process control information from an image data generating apparatus;

providing the image data and the image process control information to the processor, wherein

the image process control information designates image process conditions for the retrieved image data at an output apparatus, and wherein the image process control information is preliminarily determined according to a combination of an image generating characteristic of said image generating apparatus and reproduction characteristics of the output apparatus; and

processing said image data using the image data and the image process control information.

Claim 58: The method of Claim 57, wherein:

said image process control information and said image data are included in a single image file.

Claim 59: The method of Claim 57, wherein:

the processing step includes processing of the image data at the output apparatus.

Claim 60: The method of Claim 59, wherein:

the image process control information includes gamma correction information.

Claim 62: A computer program product, comprising:

a computer storage medium; and

a computer program code stored in the computer storage medium for implementing an image processing on a computer, the computer program code having

a first computer code configured to retrieve image data and image process control data associated with the image data from an image data generating apparatus, wherein the image process control data contains image process control information that designates image process conditions for the image data at an output apparatus, and wherein the image process control information is preliminarily determined according to a combination of an image generating characteristic of said image data generating apparatus and reproduction characteristics of the output apparatus,

a second computer code configured to perform image processing on the image data using the image data and the image process control information, if the image process control data is retrieved.

Claim 63: A computer program product of Claim 62, further comprising:

a third computer code configured to perform image data processing on the image data using a predetermined image process control data, if the image process control data is not retrieved, and wherein the predetermined image process control data is configured to general purpose image processing.

Claim 64: An image data processing system, comprising:

an image data generating device configured to generate image data;

an image process control information obtaining mechanism configured to obtain image process control information that designates image process conditions for the

generated image data at an output apparatus, wherein the image process control information is preliminarily determined according to a combination of an image generating characteristic of said image data generating device and reproduction characteristics of the output apparatus;

an output mechanism configured to output the generated image data associated with the obtained image process control information in an output file;

a processor; and

a data retrieval mechanism configured to retrieve said output file and provide the output file to the processor, wherein

said processor is configured to perform image processing on said image data using the image data and the image process control information.

### Claim 65: The system of Claim 64, further comprising:

a personal computer that contains said processor and said data retrieval mechanism.

#### Claim 66: An image data processing system, comprising:

an image data generating apparatus, including

an image data generating mechanism configured to generate image data of a subject and store said image data in an image file,

a first image obtaining mechanism configured to obtain first information preliminarily prepared to reflect image generating characteristics of the image data generating apparatus, the first information being used in color conversion to an absolute color space,

a second image obtaining mechanism configured to obtain second information preliminarily prepared to reflect reproduction characteristics of an output apparatus that outputs an image according to image data that is input from the image data generating apparatus, the second information designates an optional image quality adjustment process to image data that is output to the output apparatus; and

an image processing apparatus, including

a processor,

a data retrieval mechanism configured to retrieve said generated image data, said first information, and second information and provide said generated image data, said first information and said second information to the processor, wherein

said processor is configured to implement

a first reproduction mechanism configured to perform image processing on said image data with said first information, and

a second reproduction mechanism configured to perform a reproduction process specified for said image data based on said second information, and an image data output mechanism configured to output the image data after said image data has been processed by said first reproduction mechanism and said second reproduction mechanism.

#### Claim 67: An image data processing system, comprising:

means for generating image data;

means for obtaining image process control information that designates image process conditions for the generated image data at an output apparatus, wherein the image process control information is preliminarily determined according to a combination of an

image generating characteristic of said means for generating image data and reproduction characteristics of the output apparatus;

means for generating an image file with image process control data containing the image process control information;

a processor; and

means for retrieving said image file and providing the image file to the processor, said image file including

the image data, and

the image process control data, wherein

said processor includes means for processing said image data using the image process control information.

Claim 68: An image data processing system, comprising:

means for generating an image file, including,

means for generating image data of a subject,

means for obtaining first information preliminarily prepared to reflect image generating characteristics of the means for generating image data, the first information being used in color conversion to an absolute color space,

means for obtaining second information preliminarily prepared to reflect reproduction characteristics of an output apparatus that outputs an image according to image data that is input from the means for generating image data, the second information designates an optional image quality adjustment process to image data that is output to the output apparatus, and

means for generating the image file containing the image data and at least one of the first information and the second information; and

an image processing apparatus including,

a processor, and

means for retrieving said image file and providing said image file to the processor, said image file including

the image data, the first information and the second information, wherein said processor includes means for processing said image data using the first information and the second information.

### Claim 69: An image data generating apparatus comprising:

an image data generating module configured to generate image data of a subject by photoelectric converter;

a storage module configured to store image process control information that is preliminarily determined according to an output result of the generated image data at an output apparatus, the image process control information designating an image processing condition for image data that is output to the output apparatus;

an image process control information obtaining module configured to obtain the image process control information from the storage module; and

an output module configured to output the generated image data associated with the obtained image process control information.

Claim 70: An image data generating apparatus according to claim 69, wherein the image generating apparatus includes a digital still camera.

### Claim 71: A digital still camera comprising:

an image data generating module that generates image data;

an image process control information obtaining module that obtains image process control information, wherein the image process control module is preliminarily determined according to a combination of image generating characteristics of the digital still camera and reproducing characteristics of an output apparatus, wherein the image process control information designates an image processing condition for image data that is output to the output apparatus; and

an output module that outputs the generated image data associated with the obtained image process control information.

# IX. EVIDENCE APPENDIX

There is currently no evidence entered and relied upon in this Appeal.

# X. RELATED PROCEEDINGS APPENDIX

There are currently no decisions rendered by a court or the Board in any proceeding identified in the Related Appeals and Interferences section.